Work Order Monday, February												Page 1
Revision ID:	03492-043		A	Accept						Setup Star		
	/8/2011	<b>Start Qty:</b> 20.00 <b>Req'd Qty:</b> 20.00				Cust Item II	D:			310		
		n: WF	Date:11-02-07	_			ıte:		]	Run Stai Sto	n 118811181 B	
. •	QC:		Date:	<b>SPC (Y/N):</b>		Da	ite:			50		
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	r	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revis	sion Nbr		-	-							
D3492	Rev (	C										
100 Hardinge		Hardinge CNC LATHE SI	MALL	0.00					20	d		
Hardinge CNC Lathe S	Small	1-Turn as per Rev:	Folio FA632 & Dwg D3492	20Dwg Rev: <u>C</u> ///2/2:								
		QC2- Inspect parts off mad	chine FAI/FAIB	0.00						/		
		Memo		0.00					20	B_		
			11	12/22	٠							

120

QC

QC8- Inspect parts - second check

0.00

Memo

Quality Control

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W/O:			WC	ORK ORDER CHANG	SES					
DATE	STEP	PRO	DCEDURE CHA	NGE		Зу	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
			•					1		
Part No	:	PAR #:	Fault Cate	gory:	NCR:	Yes N	lo <b>DQ</b>	A:	Date: _	
	Re	esolution:	Dispositio	n:	QA: N	I/C Clo	sed:		Date: _	
NCR:			WORK ORD	ER NON-CONFORM	ANCE (	NCR)				
DATE	STEP	Description of NC			ction B	0:		cation	Approval	Approval
DATE	SIEF	Section A	Initial Chief Eng	Initial Action Description Chief Eng Chief Eng			Sign & Section Date		Chief Eng	QC Inspector
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Page 2

Monday, February 07, 2011 11:14:31 AM

Item ID:

D3492-043

Accept

Setup Start

Stop



**Revision ID:** 

**Item Name:** Plug Assembly

**Start Date:** Required Date: 2/22/2011

2/8/2011

**Start Qty: 20.00** 

Req'd Qty: 20.00



**Cust Item ID:** 

Customer:

Reference:

Process Plan:

Date: \_\_\_\_\_

**Tooling:** 

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Reject

Qty



Sequence ID/ **Work Center ID** 

130

HandFinish

Hand Finishing

Operation Description

Chemical Conversion Coat per QSI005 4.1

Memo

Set Up/ **Run Hours** 

0.00

0.00

Tool ID

Tool # Plan Code

Accept Qty

Reject Number

Insp. Stamp

140



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Memo

20 Bl 10-2-24.

150

QC3- Inspect Part Finish

0.00

0.00

70 d Il 1/02/25

Quality Control

Memo

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W/O:			W	ORK ORDER CH	ANGES					
DATE	STEP	PRO	OCEDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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										·
Part No	:	PAR #:	Fault Ca	tegory:	NC	R: Yes I	No <b>DQ</b>	A:	Date:	
	R	esolution:	Disposit	ion:	QA	: N/C Clo	sed:		Date: _	
NCR:			WORK OR	DER NON-CONFO	RMANCE	(NCR	)			
DATE	STEP	Description of NC		Corrective Action	Section B	0: 0	Verifi	cation	Approval	Approval
DAIE	SIEP	Section A	Initial Chief Eng	Action Descrip Chief Eng	otion	Sign & Date	Sect	ion C	Chief Eng	QC Inspector
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<sup>,</sup> NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

### Work Order ID 66150

Monday, February 07, 2011 11:14:31 AM



Page 3

Item ID:

D3492-043

Accept



Setup Start



**Revision ID:** 

**Start Date:** 

Item Name: Plug Assembly

Required Date: 2/22/2011

2/8/2011

**Start Qty: 20.00** Req'd Qty: 20.00

Operation

Description

Cust Item ID:

**Customer:** 

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Start Run

Qty



QC: \_\_\_

Date: \_\_\_\_\_

SPC (Y/N):

Date:

Stop

Stop

Sequence ID/ Work Center ID

160

Packaging Packaging

Memo

Memo

Identify as per dwg & Stock Location:

Set Up/ **Run Hours** 

0.00

0.00

Tool ID

Tool # Plan Code

Accept Qty

Reject Reject

Insp. Number Stamp

170

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

0.00

M (02/28)

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W/O:			W	ORK ORDER CHANG	ES				
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	egory:	_ NCR: Yes	No DC	A:	Date: _	
	R	esolution:	Disposition	on:	_ QA: N/C CI	osed: _		Date: _	
NCR:			WORK ORD	ER NON-CONFORMA	ANCE (NCF	R)			
D.4.T.F	0750	Description of NC	on of NC Corrective Action			Verif	ication	Approval	Approval
DATE	STEP	Section A	<b>Initial</b> Chief Eng	Initial Action Description Chief Eng Chief Eng			tion C	Chief Eng	QC Inspector
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<sup>,</sup> NOTE: Date & initial all entries

<sup>\*</sup> H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

### **Picklist Print**

Monday, February 07, 2011 11:14:25 AM

Work Order ID: 66150

Parent Item:

D3492-043

Parent Item Name: Plug Assembly



Start Date: 2/8/2011

Required Date: 2/22/2011

**Start Qty: 20.00** 

Required Qty: 20.00

Comments:

IPP Rev: A 06.03.21 New Issue JLM IPP Rev:B 06-08-28 As per Rev B JLM

IPP Rev:C 07-12-06 Rev C dwg DD verified by:EC IPP Rev:D 08-05-07 add note to count qty DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Primary Item Locatio	, —	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.750		Purchased	No		100	f	47.4898	0.0625	1.315789	10	1/2/	22

<b>Location</b>	Loc Oty	Loc Code	
MAT	47.473		•
115469	0.0027		
_ 115869	2.4453		
116406	45.025		1,3 14
MAT012	0.016842105		
112442	0.01684211		

Page 1

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W/O:			WO	RK ORDER CHANG	ES					
DATE	STEP	PRO	OCEDURE CHAI	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
							,			
Part No	:	PAR #:	Fault Cate	jory:	_ NCF	R: Yes I	No DQ	A:	Date: _	
	Re	esolution:	Disposition	1:	QA:	N/C Clo	sed:		Date: _	
NCR:			WORK ORDI	R NON-CONFORM	ANCE	(NCR	)			
DATE	STEP	Description of NC			V			Verification Approva		Approval
DATE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date	Sect	ion C	Chief Eng	QC Inspector
	'									

DART AEROSPACE LTD	Work Order:	610150
Description: Plug	Part Number:	D3492-3
Inspection Dwg: D3492 Rev: C		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

X	First Article	Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.750	+/-0.010	0,250		-	Vela	27-6
Ø0.582	+0.008/-0.001	0,582				•
0.045	+0.000/-0.002	.0445			_	
0.060	+/-0.005	:06B				
0.060	+/-0.005	-060				
0.500	+/-0.010	.00				
0.090	+0.000/-0.002	-020		_		
					•	
					<u>-</u>	
						eter Val
					<u> </u>	

	<b>\</b>				
Measured by:	42		Audited by:	Prototype Approval:	N/A
Date:	11/2/2	2	Date: 1/. 2 - 22	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	06.07.07	New Issue P/O D3492-043	KJ/JLM	
В	06.10.16	Ø0.750 was Ø0.625	KJ/JLM , ,	
С	08.09.04	Tolerance revised for Ø0.750	KJ/DD of	

W/O:			WORK ORDER CHANGES												
DATE	STEP	PRO	CEDURE CH	IANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector					
			···												
Part No: PA		PAR #:	Fault Ca	tegory:	NCR: Yes No DQA: Date:										
	R	esolution:	Disposit	ion:	QA	A: N/C Closed: Date:									
NCR:			WORK OR	DER NON-CON	FORMANC	E (NCR	)	·							
DATE	STEP	Description of NC	Corrective Action Secondarial Action Description			ction B Sign &		Verification		Approval					
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-NAS1611 PLUG (SEE TABLE) D3492-XX PLUG (SEE TABLE)-

### D3492-XXX PLUG PARTS LIST

QTY -041	-043	QTY -045	QTY -047	-049	-051	QTY -053	PART NUMBER	DESCRIPTION
X							D3492-041	PLUG ASSEMBLY
	X						D3492-043	PLUG ASSEMBLY
		X					D3492-045	PLUG ASSEMBLY
	L		X				D3492-047	PLUG ASSEMBLY
	1	1		X			D3492-049	PLUG ASSEMBLY
					Х		D3492-051	PLUG ASSEMBLY
						X	D3492-053	PLUG ASSEMBLY
1							D3492-1	PLUG
	1						D3492-3	PLUG
	1	1					D3492-5	PLUG
			1				D3492-7	PLUG
			l	1			D3492-9	PLUG
					1		D3492-11	PLUG
						1	D3492-13	PLUG
		1					NAS1611-005	O-RING
			1				NAS1611-007	O-RING
1							NAS1611-010	O-RING
						1	NAS1611-012	O-RING
	1						NAS1611-013	O-RING
					1		NAS1611-015	O-RING
				1			NAS1611-016	O-RING

<u>&</u> & &

NOTES: 1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX



DEO ATTACHED

С	ADD -04	9/-051/-053, CF	ANGE DRAWING FORMAT	PH	07.10.05			
В	ADD -04	7; UPCATE DI	A FOR -045	PH	06.05.11			
Α	NEW IS	SUE	PH 0					
REV.	DESCRI	PTION		BY	DATE			
DESIGN	1	pu-	DART AEROSPACE LTD					
DRAWN A			HAWKESBURY, ONTARIO, CANADA					
CHECK	ED	, h	DRAWING NO.		REV. C			
MFG. A	PPR.		D3492		SHEET 1 OF 2			
APPRO	VED	M	TITLE	TITLE				
DE APPR.		#	PLUG		2:1			
DATE	07.1	0.05	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IN PRIVATE AND COMPRENTIL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS					

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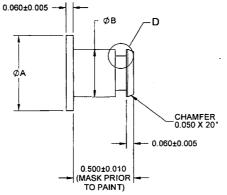
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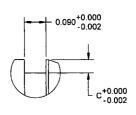
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DATE	STEP	<b>Description of NC</b> Section A		Corrective Action Section			cation	Approval	Approval					
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-POWDER COAT THESE FACES ONLY PER NOTE 2

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**DETAIL D** 

#### **D3492-XX PLUG MACHINING DETAILS**

P/N	Α	В	C	MATERIAL SPEC	
D3492-1	0.625	0.394	0.055	M6061T6R0.625	
 D3492-3	0.750	0.582	0.045	M6061T6R0.750	~
D3492-5	0.375	0.188	0.045	M6061T6R0.375	$\neg$
D3492-7	0.500	0.270	0.045	M6061T6R0.500	
D3492-9	0.938	0.750	0.045	M6061T6R1.000	
D3492-11	0.850	0.664	0.045	M6061T6R0.875	
D3492-13	0.750	0.520	0.045	M6061T6R0.750	

NOTES:
1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR QQ-A-225/8 (6061) OR QQ-A-200/8 (6061) OR QQ-A-225/1 (1100) (REF. DART MATERIAL SPEC M6061T6R0.000)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED 4) UNITS: INCHES UNLESS OTHERWISE NOTED 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX 6) IDENTIFICATION: N/A 7) WEIGHT: N/A

DESIGN DART AEROSPACE LTD DRAWN HAWKESBURY, ONTARIO, CANADA DRAWING NO. CHECKED D3492 MFG. APPR. APPROVED TITLE DE APPR

DEO ATTACHED

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SCALE

SHEET 2 OF 2

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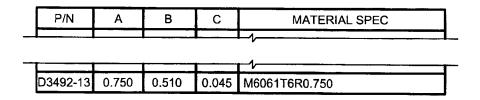
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NCR:		\	WORK ORE	DER NON-CONFORMA	ANCE	(NCR)							
DATE	STEP	Description of NC		Corrective Action Section B			Verific		Approval	Approval			
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DRAWING	NO.	TITLE		ŖEV. C	DART AEROSPACE LT	D D.E.O. NO.	SHEET NO.	SCALE
D3492	-	PLUG			ENGINEERING ORDE	R D3492-C-1	SHEET 1 OF 1	NTS
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DATE	08.11.	05	DATE	08 ii 05	DATE 08. ((. aS	DATE 08/11/05	DATE 08/H/0	5

SHEET 2 MODIFY -13 PLUG AS SHOWN:

IS:

### **D3492-XX PLUG MACHINING DETAILS**



WAS:

## **D3492-XX PLUG MACHINING DETAILS**

	P/N	Α	В	С	MATERIAL SPEC
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W/O:		WORK ORDER CHANGES												
DATE	STEP	PRO	OCEDURE CHAN	IGE	В	/	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
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	R	esolution:	Disposition	QA: N/	C Clo	sed:		Date: _						
NCR:			WORK ORDE	R NON-CONFORM	IANCE (N	ICR)								
DATE	CTED	Description of NC	Corrective Action Section B			Verif			Approval	Approval				
DATE	STEP	Section A	Initial Chief Eng	Action Description  Chief Eng				on C	Chief Eng	QC Inspector				
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